Geppetti, P., see Manzini, S., 237
Goto, M. and Ebihara, S., The influence of different light intensities on pineal melatonin content in the retinal degenerate C3H mouse and the normal CBA mouse, 267
Grewal, A., see Mathers, D.A., 127
Grudt, T.J., see Shojaku, H., 99

Hachiya, T., see Shimosawa, S., 11
Hagiwara, M., see Shimosawa, S., 11
Hancock, M.B., see Nicholas, A.P., 22
Helke, C.H., see Thor, K.B., 249
Heppelmann, B. and Schaible, H.-G., Origin of sympathetic innervation of the knee joint in the cat: a retrograde tracing study with horseradish peroxidase, 71
Hidaka, H., see Shimosawa, S., 11
Hietala, J., Salonen, I., Lappalainen, J. and Syvälahti, E., Ethanol administration does not alter dopamine $D_1$and $D_2$ receptor characteristics in rat brain, 289
Hofman, A., see Van Duijn, C.M., 350
Holzer, P., Peskar, B.M., Peskar, B.A. and Amann, R., Release of calcitonin gene-related peptide induced by capsaicin in the vascularly perfused rat stomach, 195
Hubbard, J.I., Hyland, B.I. and Sirett, N.E., Stimulation of the H release by naloxone in anaesthetized cats after ovariectomy, 295
Hyland, B.I., see Hubbard, J.I., 295

Jacobson, A.E., see Nabeshima, T., 321
Jahr, C.E., see Nawy, S., 279
Jansen, K.L.R., Faull, R.L.M., Dragunow, M. and Waldvogel, H., Autoradiographic localisation of NMDA, quisqualate and kainic acid receptors in human spinal cord, 53

Kameyama, T., see Nabeshima, T., 321
Kangrga, I., Larew, J.S.A. and Randic, M., The effects of substance P and calcitonin gene-related peptide on the efflux of endogenous glutamate and aspartate from the rat spinal dorsal horn in vitro, 155
Karanas, A.L., see Burke, R.E., 58
Kiskin, N.I., see Chizhmakov, I.V., 88
Klaidman, L.K., see Odunze, I.N., 346
Klimek, V., Nowak, G., Zak, J. and Maj, J., The effect of repeated treatment with brofaromine, moclobemide and deprenyl on $\alpha_1$-adrenergic and dopaminergic receptors in the rat brain, 189
Kowall, N.W., see Beal, M.F., 36
Krishtal, O.A., see Chizhmakov, I.V., 88

Lappalainen, J., see Hietala, J., 289
Larew, J.S.A., see Kangrga, I., 155
Lau, Y.-S., see Wilson, J.A., 213
Lee, T.-Y., see Lui, P.-W., 183
Lee, W.T., see Patterson, J.T., 6
Lemke, M., Fei, B., Ames, B.N. and Faden, A.I., Decreases in tissue levels of ubiquinol-9 and -10, ascorbate and tocopherol following spinal cord impact trauma in rats, 201
Lindsay, R.M., see Mulderry, P.K., 314
Llewellyn-Smith, I.J., Minson, J.B., Morilak, D.A., Oliver, J.R. and Chalmers, J.P., Neuropeptide Y-immunoreactive synapses in the intermediolateral cell column of rat and rabbit thoracic spinal cord, 243
Lui, P.-W., Lee, T.-Y. and Chan, S.H.H., Involvement of coerulospinal noradrenergic pathway in fentanyl-induced muscular rigidity in rats, 183
Lynch, G., see Seubert, P., 303
Löscher, W., see Wahanschaffe, U., 161

Maggi, C.A., see Manzini, S., 237
Maj, J., see Klimek, V., 189
Malouf, A.T., Robbins, C.A. and Schwartzkroin, P.A., Epileptiform activity in hippocampal slice cultures with normal inhibitory synaptic drive, 76
Manzini, S., Geppetti, P. and Maggi, C.A., Sensory neuropeptides in health and disease. Conference report on Florence '89, 237
Marchand, A., see Cattaert, D., 81
Massari, V.J., see Gatti, P.J., 284
Mathers, D.A., Grewal, A. and Wang, Y., $\beta$-Alanine induced ion channels in the membrane of cultured spinal cord neurons, 127
Matsuo, R. and Yamamoto, T., Taste nerve responses during licking behavior in rats: importance of saliva in responses to sweeteners, 121
Mellow, A.M., see Cossery, J.M., 149
Mense, S., see Xian-Min, Y., 43
Mercier, A.J., see Bradacs, H., 110
Metcalf, R.H., Riddell, D.L. and Boegman, R.J., Acetylcholine content and distribution in rat cortical synaptosomes after in vivo exposure to quinolinic acid, 219
Mienville, J.-M., see Cossery, J.M., 149

Geppetti, P., see Manzini, S., 237
Goto, M. and Ebihara, S., The influence of different light intensities on pineal melatonin content in the retinal degenerate C3H mouse and the normal CBA mouse, 267
Grewal, A., see Mathers, D.A., 127
Grudt, T.J., see Shojaku, H., 99

Hachiya, T., see Shimosawa, S., 11
Hagiwara, M., see Shimosawa, S., 11
Hancock, M.B., see Nicholas, A.P., 22
Helke, C.H., see Thor, K.B., 249
Heppelmann, B. and Schaible, H.-G., Origin of sympathetic innervation of the knee joint in the cat: a retrograde tracing study with horseradish peroxidase, 71
Hidaka, H., see Shimosawa, S., 11
Hietala, J., Salonen, I., Lappalainen, J. and Syvälahti, E., Ethanol administration does not alter dopamine $D_1$and $D_2$ receptor characteristics in rat brain, 289
Hofman, A., see Van Duijn, C.M., 350
Holzer, P., Peskar, B.M., Peskar, B.A. and Amann, R., Release of calcitonin gene-related peptide induced by capsaicin in the vascularly perfused rat stomach, 195
Hubbard, J.I., Hyland, B.I. and Sirett, N.E., Stimulation of the H release by naloxone in anaesthetized cats after ovariectomy, 295
Hyland, B.I., see Hubbard, J.I., 295

Jacobson, A.E., see Nabeshima, T., 321
Jahr, C.E., see Nawy, S., 279
Jansen, K.L.R., Faull, R.L.M., Dragunow, M. and Waldvogel, H., Autoradiographic localisation of NMDA, quisqualate and kainic acid receptors in human spinal cord, 53

Kameyama, T., see Nabeshima, T., 321
Kangrga, I., Larew, J.S.A. and Randic, M., The effects of substance P and calcitonin gene-related peptide on the efflux of endogenous glutamate and aspartate from the rat spinal dorsal horn in vitro, 155
Karanas, A.L., see Burke, R.E., 58
Kiskin, N.I., see Chizhmakov, I.V., 88
Klaidman, L.K., see Odunze, I.N., 346
Klimek, V., Nowak, G., Zak, J. and Maj, J., The effect of repeated treatment with brofaromine, moclobemide and deprenyl on $\alpha_1$-adrenergic and dopaminergic receptors in the rat brain, 189
Kowall, N.W., see Beal, M.F., 36
Krishtal, O.A., see Chizhmakov, I.V., 88

Lappalainen, J., see Hietala, J., 289
Larew, J.S.A., see Kangrga, I., 155
Lau, Y.-S., see Wilson, J.A., 213
Lee, T.-Y., see Lui, P.-W., 183
Lee, W.T., see Patterson, J.T., 6
Lemke, M., Fei, B., Ames, B.N. and Faden, A.I., Decreases in tissue levels of ubiquinol-9 and -10, ascorbate and tocopherol following spinal cord impact trauma in rats, 201
Lindsay, R.M., see Mulderry, P.K., 314
Llewellyn-Smith, I.J., Minson, J.B., Morilak, D.A., Oliver, J.R. and Chalmers, J.P., Neuropeptide Y-immunoreactive synapses in the intermediolateral cell column of rat and rabbit thoracic spinal cord, 243
Lui, P.-W., Lee, T.-Y. and Chan, S.H.H., Involvement of coerulospinal noradrenergic pathway in fentanyl-induced muscular rigidity in rats, 183
Lynch, G., see Seubert, P., 303
Löscher, W., see Wahanschaffe, U., 161

Maggi, C.A., see Manzini, S., 237
Maj, J., see Klimek, V., 189
Malouf, A.T., Robbins, C.A. and Schwartzkroin, P.A., Epileptiform activity in hippocampal slice cultures with normal inhibitory synaptic drive, 76
Manzini, S., Geppetti, P. and Maggi, C.A., Sensory neuropeptides in health and disease. Conference report on Florence '89, 237
Marchand, A., see Cattaert, D., 81
Massari, V.J., see Gatti, P.J., 284
Mathers, D.A., Grewal, A. and Wang, Y., $\beta$-Alanine induced ion channels in the membrane of cultured spinal cord neurons, 127
Matsuo, R. and Yamamoto, T., Taste nerve responses during licking behavior in rats: importance of saliva in responses to sweeteners, 121
Mellow, A.M., see Cossery, J.M., 149
Mense, S., see Xian-Min, Y., 43
Mercier, A.J., see Bradacs, H., 110
Metcalf, R.H., Riddell, D.L. and Boegman, R.J., Acetylcholine content and distribution in rat cortical synaptosomes after in vivo exposure to quinolinic acid, 219
Mienville, J.-M., see Cossery, J.M., 149

Minson, J.B., see Llewellyn-Smith, I.J., 243
Monn, J.A., see Nabeshima, T., 321
Morilak, D.A., see Llewellyn-Smith, I.J., 243
Morinaka, H., see Nabeshima, T., 321
Morita, Y., see Noguchi, K., 1
Mulderry, P.K. and Lindsay, R.M., Rat dorsal root ganglion neurons in culture express vasoactive intestinal polypeptide (VIP) independently of nerve growth factor, 314
Murase, K., see Shirasaki, T., 93
Murray, C.W. and Cowan, A., Formalin nociception in the mouse does not lead to increased spinal serotonin turnover, 132
Murthy, Ch.R.K., see Ratnakumari, L., 328

Nabeshima, T., Yoshida, S., Morinaka, H., Kameyama, T., Thurkauf, A., Rice, K.C., Jacobson, A.E., Monn, J.A. and Cho, A.K., MK-801 ameliorates delayed amnesia, but potentiates acute amnesia induced by CO, 321
Naftolin, F., see Perez, J., 17
Nagelkerken, L., see Van Duijn, C.M., 350
Nakagawa, T., see Shirasaki, T., 93
Nakazato, Y., see Teraoka, H., 179
Nawy, S. and Jahr, C.E., Time-dependent reduction of glutamate current in retinal bipolar cells, 279
Nicholas, A.P. and Hancock, M.B., Evidence for projections from the rostral medullary raphe onto medullary catecholamine neurons in the rat, 22
Noguchi, K., Senba, E., Morita, Y., Sato, M. and Tohyama, M., Co-expression of $\alpha$CGRP and $\beta$-CGRP mRNAs in the rat dorsal root ganglion cells, 1
North, R.A., see Galligan, J.J., 105
Nowak, G., see Klimek, V., 189

Odunze, I.N., Klaidman, L.K. and Adams, J.R., Jr., MPTP toxicity in the mouse brain and vitamin E, 346
Ohga, A., see Teraoka, H., 179
Oliver, J.R., see Llewellyn-Smith, I.J., 243
Osswald, H., see Wessler, I., 173

Patterson, J.T., Coggeshall, R.E., Lee, W.T. and Chung, K., Long ascending unmyelinated primary afferent axons in the rat dorsal column: immunohistochemical localizations, 6
Pellegrino de Iraldi, A., see De Lores Arnaiz, G.R., 309
Perez, J., Tranque, P.A., Naftolin, F. and Garcia-Segura, L.M., Gap junctions in the hypothalamic arcuate neurons of ovariectomized and estradiol-treated rats, 17
Peskar, B.A., see Holzer, P., 195
Peskar, B.M., see Holzer, P., 195
Peterson, C., see Seubert, P., 303
Pevet, P., see Skene, D.J., 138
Pinkas-Kramarski, R., Edelman, R. and Stein, R., Indications for selective coupling to phosphoinositide hydrolysis or to adenylate cyclase inhibition by endogenous muscarinic receptor subtypes $M_3$ and $M_4$ but not by $M_2$ in tumor cell lines, 335
Probst, Th. and Wist, E.R., Electrophysiological evidence for visual–vestibular interaction in man, 255

Randic, M., see Kangrga, I., 155
Ratnakumari, L. and Murthy, Ch.R.K., Effect of methionine sufloximine on pyruvate dehydrogenase, citric acid cycle enzymes and aminotransferases in the subcellular fractions isolated from rat cerebral cortex, 328
Rice, K.C., see Nabeshima, T., 321
Riddell, D.L., see Metcalf, R.H., 219
Robbins, C.A., see Malouf, A.T., 76
Roth, R.H., see Bean, A.J., 143
Rouiller, E.M. and De Ribaupierre, F., Arborization of corticothalamic axons in the auditory thalamus of the cat: a PHA-L tracing study, 29

Salonen, I., see Hietala, J., 289
Sato, M., see Noguchi, K., 1
Schaible, H.-G., see Heppelmann, B., 71
Schlemmer, F., see Wessler, I., 173
Schwartzkroin, P.A., see Malouf, A.T., 76
Senba, E., see Noguchi, K., 1
Seubert, P., Peterson, C., Vanderklish, P., Cotman, C. and Lynch, G., Increased spectrin proteolysis in the brindled mouse brain, 303
Sheehy, P.A., see Cossery, J.M., 149
Sheridan, R.D. and Sutor, B., Presynaptic $M_1$ muscarinic cholinoceptors mediate inhibition of excitatory synaptic transmission in the hippocampus in vitro, 273
Shimosawa, S., Hachiya, T., Hagiwara, M., Usuda, N., Sugita, K. and Hidaka, H., Type-specific expression of protein kinase C isozymes in CNS tumor cells, 11
Shin, H.-C. and Chapin, J.K., Modulation of

afferent transmission to single neurons in the ventroposterior thalamus during movement in rats, 116
Shirasaki, T., Nakagawa, T., Wakamori, M., Tateishi, N., Fukuda, A., Murase, K. and Akaike, N., Glycine-insensitive desensitization of *N*-methyl-D-aspartate receptors in acutely isolated mammalian central neurons, 93
Shojaku, H., Grudt, T.J. and Barmack, N.H., Vestibular and visual signals in the ventral paraflocculus of the cerebellum in rabbits, 99
Sirett, N.E., see Hubbard, J.I., 295
Skene, D.J., Vivien-Roels, B. and Pevet, P., 5-Methoxytryptophol injections in the Syrian hamster: plasma and pineal concentrations, 138
Stein, R., see Pinkas-Kramarski, R., 335
Stoof, J.C., see Werkman, T.R., 167
Su, T.-P. and Wu, X.-Z., Guinea pig vas deferens contains $\sigma$ but not phencyclidine receptors, 341
Sugimoto, T., see Takemura, M., 65

Wakamori, M., see Shirasaki, T., 93
Wakisaka, S., see Takemura, M., 65
Waldvogel, H., see Jansen, K.L.R., 53
Wang, Y., see Mathers, D.A., 127
Watanobe, H., and Takebe, K., Effect of the glucocorticoid milieu on the immunostaining of peptide histidine isoleucine (PHI) in the rat hypothalamus, 48
Werkman, T.R., De Vlieger, T.A. and Stoof, J.C., Indications for a hormonal function of dopamine in the central nervous system of the snail *Lymnaea stagnalis*, 167
Wessler, I., Dooley, D.J., Osswald, H. and Schlemmer, F., Differential blockade by nifedipine and $\omega$-conotoxin GVIA of $\alpha_1$- and $\beta_1$-adrenoceptor-controlled calcium channels on motor nerve terminals of the rat, 173
Wilson, J.A., Doyle, T.J. and Lau, Y.-S., MPTP, $MPDP^+$ and $MPP^+$ cause decreases in dopamine content in mouse brain slices, 213
Wist, E.R., see Probst, Th., 255
Wu, X.-Z., see Su, T.-P., 341

Xian-Min, Y. and Mense, S., Somatotopical arrangement of rat spinal dorsal horn cells processing input from deep tissues, 43

Yamamoto, T., see Matsuo, R., 121
Yoshida, S., see Nabeshima, T., 321

Zak, J., see Klimek, V., 189

**CONTENTS** *(continued from back cover)*

*Erratum* 355
*Corrigendum* 355
*Author Index* 357